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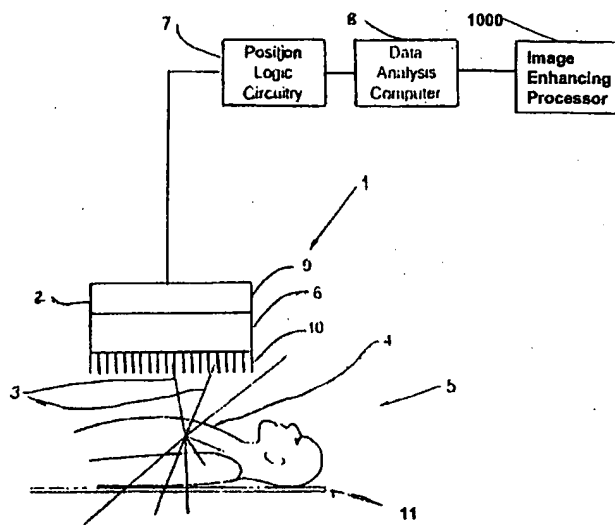
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(54) Title: RADIOPHARMACEUTICAL IMAGING



(57) Abstract: An apparatus and method for obtaining a planar image of a portion (4) of a body (5) and enhancing image quality of at least one specific organ or volume of interest located within the portion (4) of the body (5), administered with radiopharmaceutical substance radiating gamma rays, by using single photon emission imaging, for determination of functional information thereon, comprising : (a) acquiring at least one projection data of the portion (4), by means of a gamma camera detector (2); (b) determining the effective distance between the detector (2) and the specific organ of interest; (c) calculating weight values taking into account acceptance angles of the gamma camera detector (2) and the effective distance; and (d) obtaining a two dimensional image of a spatial distribution of the pharmaceutical substance within the portion (4) by mathematically analyzing the data in conjunction with weight values.

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